REFRACTIVE OUTCOMES AFTER INTRACORNEAL RING IMPLANTATION

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Purpose: The investigation of refractive error and visual acuity before and 6 months after myoring implantation in patients with keratoconus at Farabi hospital in Tehran, Iran. Methods: In this retrospective study, thirty-four eyes of twenty-eight keratoconic patients files with mean age of 29 ± 7.41underwent myoring operation and they were reevaluated after 6 months. In these patients best corrected visual acuity (BCVA), refractive outcomes and Pentacam[Oculus GmbH] findings were assessed. All patients had clear central corneas, contact lens intolerance, and a central corneal thickness of more than 360 mm. Results: Six months postoperately, the mean BCVA (in LogMAR value) improved significantly from 0.30 ±0.22 to 0.20 ± 0.20 (p=0.006) and the mean spherical refractive error improved from -4.66 diopters(D) ± 3.76 to -1.48D ± 3.72 (p0.001). The mean cylindrical refractive error decreased significantly from -4.27D ±3.15 to -2.18D ±1.63 (P0.001). In cylindrical refraction, the frequency percent of with the rule, oblique and against the rule axes of astigmatism before operation were 21% ,44% and 35% ,respectively and after operation have been 18% ,24% and 58% ,respectively. Conclusion: Myoring operation provided significant improvement in BCVA, spherical and cylindrical refractive error.
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